IN THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) A shared medium communication system ~~(100)~~ comprising:

[[-]] a primary station ~~(102)~~ arranged to receive an access request ~~(108)~~, process the access request ~~(108)~~ and send a grant ~~(110)~~ in response to the access request ~~(108)~~;

[[-]] a secondary station ~~(104)~~ for sending the access request ~~(108)~~ and for receiving the grant ~~(110)~~; and

[[-]] a shared medium ~~(106)~~ coupling the primary station ~~(102)~~ with the secondary station ~~(104)~~,

~~characterized in that~~ wherein the secondary station ~~(104)~~ is arranged to merge several access requests ~~(108)~~ into a multi request ~~(108)~~ and send the multi request ~~(108)~~ to the primary station ~~(102)~~, and ~~in that~~ wherein the primary station ~~(102)~~ is

arranged to receive the multi request ~~(108)~~, process the multi request ~~(108)~~ and send the ~~grants (110)~~ grant in response to the access requests ~~(108)~~ merged in the multi request ~~(108)~~, and

wherein the secondary station is arranged to adapt the merging of the access requests in dependence on histories of access requests previously merged, multi requests previously sent and/or grants previously received.

Claim 2 (Canceled)

3. (Currently Amended) ~~A~~ The shared medium communication system ~~(100)~~ as claimed in claim 1, ~~characterized in that~~ wherein the secondary station ~~(104)~~ is arranged to adapt the sending of the multi request ~~(108)~~ in dependence on histories of access requests ~~(108)~~ previously merged, multi requests ~~(108)~~ previously sent and/or grants ~~(110)~~ previously received.

4. (Currently Amended) A secondary station ~~(104)~~ for sending an access request ~~(108)~~ to a primary station ~~(102)~~ and for receiving a grant ~~(110)~~ from the primary station ~~(102)~~ in response

to the access request ~~(108)~~, the access request ~~(108)~~ comprising a request ~~(108)~~ for access to a shared medium ~~(106)~~, ~~characterized in that~~ wherein the secondary station ~~(104)~~ is arranged to merge several access requests ~~(108)~~ into a multi request ~~(108)~~ and send the multi request ~~(108)~~ to the primary station ~~(102)~~, and wherein the secondary station is arranged to adapt the merging of the access requests in dependence on histories of access requests previously merged, multi requests previously sent and/or grants previously received.

Claim 5 (Canceled)

6. (Currently Amended) ~~A~~ The secondary station ~~(104)~~ as claimed in claim 4, ~~characterized in that~~ wherein the secondary station ~~(104)~~ is arranged to adapt the sending of the multi request ~~(108)~~ in dependence on histories of access requests ~~(108)~~ previously merged, multi requests ~~(108)~~ previously sent and/or grants ~~(110)~~ previously received.

7. (Currently Amended) A primary station ~~(102)~~ for receiving

an access request ~~(108)~~ from a secondary station ~~(104)~~, for processing the access request ~~(108)~~ and for sending a grant ~~(110)~~ to the secondary station ~~(104)~~ in response to the access request ~~(108)~~, the access request ~~(108)~~ comprising a request ~~(108)~~ for access to a shared medium ~~(106)~~, ~~characterized in that~~ wherein the primary station ~~(102)~~ is arranged to receive a multi request ~~(108)~~ containing several merged access requests ~~(108)~~, process the multi request ~~(108)~~ and send the grants ~~(110)~~ to the secondary station ~~(104)~~ in response to the access requests ~~(108)~~ in the multi request ~~(108)~~, and wherein the secondary station is arranged to adapt the merging of the access requests in dependence on histories of access requests previously merged, multi requests previously sent and/or grants previously received.

8. (Currently Amended) A method of operating a shared medium communication system ~~(100)~~, the method comprising the acts of:

[[-]] a primary station ~~(102)~~ receiving an access request ~~(108)~~, processing the access request ~~(108)~~ and sending a grant ~~(110)~~ in response to the access request ~~(108)~~,

[[-]] a secondary station ~~(104)~~ sending the access request

~~(108)~~ to and receiving the grant ~~(110)~~ from the primary station ~~(102)~~, the access request ~~(108)~~ comprising a request ~~(108)~~ for access to a shared medium ~~(106), characterized in that the method further comprises:~~,

[[-]] the secondary station ~~(104)~~ merging several access requests ~~(108)~~ into a multi request ~~(108)~~ and sending the multi request ~~(108)~~ to the primary station ~~(102)~~, wherein the merging act is adapted in dependence on histories of access requests previously merged, multi requests previously sent and/or grants previously received, and

[[-]] the primary station ~~(102)~~ receiving the multi request ~~(108)~~, processing the multi request ~~(108)~~ and sending the grants ~~(110)~~ in response to the access requests ~~(108)~~ merged in the multi request ~~(108)~~.

Claim 9 (Canceled)

10. (Currently Amended) ~~A~~ The method as claimed in claim 8, ~~further characterized in that~~ the sending ~~of the multi request (108)~~ act is adapted in dependence on histories of access requests

~~(108)~~ previously merged, multi requests ~~(108)~~ previously sent and/or grants ~~(110)~~ previously received.

11. (Currently Amended) A method of sending an access request ~~(108)~~ to a primary station ~~(102)~~ and receiving a grant ~~(110)~~ from the primary station ~~(102)~~ in response to the access request ~~(108)~~, the access request ~~(108)~~ comprising a request ~~(108)~~ for access to a shared medium ~~(106)~~, ~~characterized in that~~ wherein the method comprises the acts of:

merging several access requests ~~(108)~~ into a multi request ~~(108)~~; and

sending the multi request ~~(108)~~ to the primary station ~~(102)~~, wherein the merging act is adapted in dependence on histories of access requests previously merged, multi requests previously sent and/or grants previously received.

12. (Currently Amended) A method of receiving an access request ~~(108)~~ from a secondary station ~~(104)~~, processing the access request ~~(108)~~ and sending a grant ~~(110)~~ to the secondary station ~~(104)~~ in response to the access request ~~(108)~~, the access request

~~(108)~~ comprising a request ~~(108)~~ for access to a shared medium ~~(106)~~, ~~characterized in that~~ wherein the method comprises the acts of:

receiving a multi request ~~(108)~~ comprising ~~several~~ merged access requests ~~(108)~~,

processing the multi request ~~(108)~~; and

sending the grants ~~(110)~~ to the secondary station ~~(104)~~ in response to the access requests ~~(108)~~ merged in the multi request ~~(108)~~, wherein a number of requests merged into the multi request is adapted in dependence on histories of access requests previously merged, multi requests previously sent and/or grants previously received.

Claim 13 (Canceled)

14. (New) The shared medium communication system of claim 1, wherein a number of requests merged to form the multi request is increased when a traffic load of the system is decreased, and the number of requests merged to form the multi request is decreased when the traffic load of the system is increased.

15. (New) The shared medium communication system of claim 1, wherein a number of requests merged to form the multi request is inversely proportional to a traffic load of the system.

16. (New) The shared medium communication system of claim 1, wherein the traffic load is predicted from the histories.

17. (New) The secondary station of claim 4, wherein a number of requests merged to form the multi request is inversely proportional to a traffic load of a system including the secondary station.

18. (New) The primary station of claim 7, wherein a number of requests merged to form the multi request is inversely proportional to a traffic load of a system including the primary station.

19. (New) The method of claim 8, wherein a number of requests merged to form the multi request is inversely proportional to a traffic load of the system.

20.(New) The method of claim 11, wherein a number of requests merged to form the multi request is inversely proportional to a traffic load of a system including the primary station.